

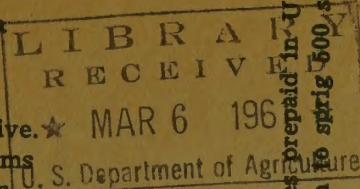
[1961]
NORDAN GRASS FARMS

"Highest Quality of Superior Turf"

Phone 58 5-5842 or 58 5-5922

Abbeville, Alabama

This price list cancels all previous quotations. Prices are subject to change without notice and are non-cumulative. Our superior turf is sold in 12" rug mat forms by the square yard. Our inferior turf such as edgings and thin turf is sold by the bushel only. Prices F.O.B. Farm.

Samples prepaid in U.S.A.
Enough to strip 500 sq. ft.—1.

Per yard, 2 to 10 sq. yds.—2.

Per yard, 11 to 25 yds.—3.

Per yard, 26 to 50 sq. yds.—4.

Per yard, 51 to 100 sq. yds.—5.

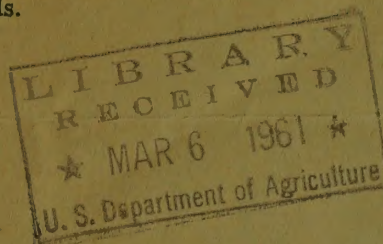
Per yard, 101 to 200 sq. yds.—6.

Per yard, 201 to 400 sq. yds.—7.

Per yard, 401 sq. yds. or more—8.

GRADE "A"—SOLID SOD LESS SOIL—Highest quality possible. Certified by Alabama Crop Improvement Association for purity of strain. Bears Alabama Department of Agriculture certificate. Grown under irrigation upon fumigated soils and dieldrin treated. No noxious weeds.

Bermuda, Tifgreen (Tifton 328)	\$5.75	4.00	3.75	3.65	3.55	3.45	3.35	3.25
Bermuda, Tiffine (Tifton 127)	5.75	4.00	3.75	3.65	3.55	3.45	3.35	3.25
Bermuda, Tiflawn (Tifton 57)	5.75	4.00	3.75	3.65	3.55	3.45	3.35	3.25
Bermuda, Tiflawn (Tifton 419)	5.75	5.00	4.75	4.65	4.55	4.45	4.35	4.25
Bermuda, Sunturf	5.75	5.00	4.75	4.65	4.55	4.45	4.35	4.25
Zoysia, Emerald	5.75	6.25	6.00	5.75	5.50	5.25	5.00	4.75
Zoysia, Matrella (No. 13521)	5.75	5.25	5.00	4.75	4.50	4.25	4.00	3.75
Zoysia, Meyer (Z-52)	5.75	4.75	4.50	4.25	4.00	3.75	3.50	3.25



GRADE "B" — SOLID SOD LESS SOIL — Bears Alabama Department of Agriculture certificate. Grown under irrigation upon fumigated soils and dieldrin treated. No noxious weeds. Same varieties as above less \$1 yd.

GRADE "C"—SOLID SOD WITH SOIL—Bears Alabama Department of Agriculture certificate. Grown under irrigation and dieldrin treated. No noxious weeds. *Denotes certified by Alabama Crop Improvement Association for purity of strain.

*Bermuda, Tifgreen (Tifton 328)	\$5.25	2.10	2.00	1.90	1.80	1.70	1.60	1.50
*Bermuda, Tiffine (Tifton 127)	5.25	2.10	2.00	1.90	1.80	1.70	1.60	1.50
*Bermuda, Tiflawn (Tifton 57)	5.25	2.10	2.00	1.90	1.80	1.70	1.60	1.50
*Bermuda, Tifway (Tifton 419)	5.25	3.10	3.00	2.90	2.80	2.70	2.60	2.50
*Bermuda, Sunturf	5.25	3.10	3.00	2.90	2.80	2.70	2.60	2.50
Bermuda, U-3	5.25	3.10	3.00	2.90	2.80	2.70	2.60	2.50
St. Augustine	5.25	1.60	1.50	1.40	1.30	1.20	1.10	1.00
Centipede, Chinese	5.25	1.60	1.50	1.40	1.30	1.20	1.10	1.00
*Zoysia, Emerald	5.25	4.00	3.75	3.50	3.25	3.00	2.75	2.50
*Zoysia, Matrella	5.25	3.00	2.75	2.50	2.25	2.00	1.75	1.50
*Zoysia, Meyer (Z-52)	5.25	2.50	2.25	2.00	1.75	1.50	1.25	1.00

Add 25c per yard for solid sod less soil. Add 10c per yard for shredding.

GRADE "D" COMMERCIAL—SOLID SOD WITH SOIL (Some varieties available in certified stock. Inquire)—Bears Alabama Department of Agriculture certificate. Grown under irrigation.

Bermuda, Tifgreen (Tifton 328)	\$5.00	(These Quantities	1.30	1.20	1.10	1.00
Bermuda, Tiffine (Tifton 127)	5.00	Not Available)	1.30	1.20	1.10	1.00
Bermuda, Tiflawn (Tifton 57)	5.00		1.30	1.20	1.10	1.00
Bermuda, Tifway (Tifton 419)	5.00		1.80	1.70	1.60	1.50
Bermuda, U-3	5.00		1.80	1.70	1.60	1.50
St. Augustine	5.00		1.25	1.00	.75	.50
Centipede, Chinese	5.00		1.50	1.25	1.00	.75
Zoysia, Emerald	5.00		2.00	1.75	1.50	1.25
Zoysia, Matrella	5.00		1.50	1.25	1.00	.75
Zoysia, Meyer (Z-52)	5.00		1.25	1.00	.75	.50

Add 25c per yard for solid sod less soil. Add 10c per yard for shredding.

Above grasses certified for free movement by the Plant Control Division, U.S.D.A.

Our Farms are closed for business Saturdays and Sundays. Visitors are welcome at all times.

"WORLD'S LARGEST COMMERCIAL ASSORTMENT OF PERMANENT LAWN GRASSES"

Inquire regarding the following BERMUDAS—Bradley No. 10, South African, Bayshore, Everglades No. 1 & 3, Ormond, Florida Special, Transvaal, Tex-Turf. Texas No. 8, 10, 11, 22, 47, 35A, Skaaplaas, Royal Cape, Gene Tift, Ideal, Uganda, Abbie, Magensii; ZOYSIAS—Common japonica, Yellow Stem japonica, Baker matrella, Mascarene, Flagstone, King matrella, Asiatic matrella, Nordan matrella, Mowless matrella, Compacto matrella, Manilagras, Philippino matrella Nos. 3 & 4, Formosa matrella; CENTIPEDES—P.I. & Red Stem; ST. AUGUSTINE; DICHONDRA (ground cover); Mondo japonicus, Monkey Grass, Lireope. (Seed of Common Zoysia japonica and Centipede only)

PLUGS, ROUND 2"x2" (SOD & SOIL) F.O.B. FARM PRICED PER 100; Quantities up to GRADE "C"	1. 1000	2. 2000	3. 3000	4. 4000	5. 5000 & more
Bermuda, Tifgreen (Tifton 328)	\$5.00	4.50	4.00	3.50	3.25
Bermuda, Tiffine (Tifton 127)	5.00	4.50	4.00	3.50	3.25
Bermuda, Tiflawn (Tifton 57)	5.00	4.50	4.00	3.50	3.25
Bermuda, Tifway (Tifton 419)	5.00	4.50	4.00	3.50	3.25
Bermuda, Sunturf	5.00	4.50	4.00	3.50	3.25
Zoysia, matrella	4.50	4.00	3.50	3.00	2.75
Zoysia, Emerald	6.00	5.50	5.00	4.50	4.00
Zoysia, Meyer	5.00	4.50	4.00	3.50	3.25

Above available in Grade "A" with fumigated soil at 20c per 100 more than above prices.

Above available in Grade "B" with fumigated soil at 10c per 100 more than above prices.

Heavy duty "2 hand pluggers \$5.50 each post paid.

TURF SETTING ESTIMATES

1 square yard equals approximately 1 to 2 bushels of loose packed turf, depending on the height of cut at time of digging.

1 square yard of the Zoysias will average sprigging 1000 square feet of area on 12-inch centers.

1 square yard of the Bermudas will average sprigging 1000 square feet of area on 12-inch centers.

1 square yard of the Centipedes will average 500 square feet of area on 12-inch centers.

1 square yard of the St. Augustine will average sprigging 500 square feet of area on 12-inch centers.

"Solid Sod Less Soil" will weigh from 7 to 15 pounds per square yard. Weight with soil, 60 to 80 lbs.

"Solid Sod Less Soil" will displace one cubic foot of packing per square yard.

CUSTOMERS SEEKING PERSONAL ADVICE WILL RECEIVE SAME PROMPTLY IF WITH THEIR QUESTIONS THEY WILL ENCLOSE TWO DOLLARS TO COVER TIME, POSTAGE AND SUPPLIES.

TERMS AND CONDITIONS OF SALE

Payment by cash, firm's check, cashier's check or money order payable to NORDAN GRASS FARMS must accompany all orders. "Pick up" orders must be placed and paid for at least three days prior to scheduled digging. Quantity purchased and paid for prior to digging determines which price column applies to order. Partial shipments of such orders are permitted. Prices are NON-CUMULATIVE. Orders will be filled on specified dates with weather permitting. WE DO NOT SHIP C.O.D. OR OPEN ACCOUNT.

Our sods are machine cut to convenient sizes for ease of handling. We exercise every care to see that our products are handled in a manner that will keep them fresh and alive. We cannot guarantee that they will either live or grow after they leave our hands. Any plants which prove something other than what they were sold for will be replaced, but in no case will a greater price be allowed for any product replaced than was originally paid.

All quotations are for immediate acceptance. No liability to us should stock be sold upon receipt of order or if injured from heat, cold or neglect in transit, or should strikes or other causes prevent delivery. F.O.B. SHIPMENTS VIA RAILWAY OR GREYHOUND BUS EXPRESS UNLESS OTHERWISE SPECIFIED.

NORDAN GRASS FARMS

"Highest Quality of Superior Turf"

Phone 58 5-5842 or 58 5-5922

Abbeville, Alabama

FOR PRIVATE USE TO AVOID
PAYMENT OF POSTAGE, \$300
(GPO)

NO FEES PAID
OF AGRICULTURE

TIFWAY BERMUDAGRASS

Tifway Bermudagrass is a chance hybrid between *Cynodon transvaalensis* and *C. dactylon* that appeared in a lot of seed of *C. transvaalensis* supplied by Dr. D. Meredith, African Explosives and Chemical Industries Limited, 40 Fox Street, Johannesburg, South Africa, in the spring of 1954. The only identifying characteristic on this lot of seed was the number "2", given to it by Dr. Meredith. Inasmuch as all other seedlings studied from this seed lot were *C. transvaalensis*, the female parent of Tifway must have been *C. transvaalensis* ($2n = 18$). The chromosome number ($2n = 27$) and other characteristics of Tifway indicate that its male parent must have been *C. dactylon* ($2n = 36$).

The principal characteristics of Tifway, three other turf Bermudas, and common Bermuda from seed are summarized in Table 1. Tifway, like our other *C. transvaalensis* x *C. dactylon* hybrids, has 27 chromosomes and, thus, will shed no pollen and set no seed. It appears to be equal or superior to Tiffine and Tifgreen in all characteristics listed except softness. It is not nearly as soft as Tifgreen and, hence, will not be as well suited for putting greens. Its greater stiffness will make it better suited than Tifgreen, however, for fairways and tees, where greater stiffness will give the ball a better lie. This greater stiffness or woodiness should result in greater resistance to sod webworm, which is particularly fond of Tifgreen. Tifway also spreads faster than Tifgreen (Table 2), which should facilitate coverage with wider sprig spacings. Tifway has a darker green color than any of the Bermudas released from Tifton. The comments of homeowners examining the turf plots at Tifton indicate that this color should make Tifway particularly popular as a lawn grass.

It is apparent that Tifway will be superior to Tiffine, Tifgreen, and Tiflawn for fairways, tees, lawns, and similar uses. The name "Tifway" (coined from Tifton and fairway) indicates one of the main uses to which we believe this grass will be put. Tifgreen, because of its greater softness, will continue to be the best grass for golf greens. Tiflawn, because of its greater coarseness and toughness, will no doubt remain the heavy-duty grass for football fields, school grounds, athletic fields, etc.

Supporting test data that recommend the release of Tifway (No. 37 in this test and No. 419 in an earlier test) appear in Tables 2, 3, and 4. Many of these data were obtained from a replicated test planted on MC-2 sterilized soil at the Georgia Coastal Plain Experiment Station in March, 1957. Each 8 x 12 foot plot was established by setting 3 by 3 feet apart 6 small plants that had been growing under uniform conditions in the greenhouse during the winter. The plant-diameter measurements taken on April 12, 1957, and summarized in column 1 of Table 2 are indicative of the rate of spread of these grasses. It is believed that most other characteristics are self explanatory. Sod density and greenness ratings were taken several times (about once a month during the growing season) but only the yearly averages have been presented.

Some of the information in Table 4 came from large fairway plots established in the spring of 1959. It was in these plots where all grasses were the same age and cut at the same height that the striking differences in frost resistance were observed. Here also was afforded an excellent opportunity to observe the very dark green color of Tifway.

Mr. T. M. Baumgardner, Vice President of the Sea Island Company, Sea Island, Georgia, has had Tifway (No. 419) under observation at Sea Island during the past season. Mr. Baumgardner, a trained landscape gardener, has been directing the turf program on the Sea Island Golf Club for many years and is one of the best authorities on turf grasses for lawns and golf that I know. A part of his December 7 report on this grass follows:

"As you know, you gave us a small sample of No. 419 early last spring for experimental purposes. We put this grass in our sod nursery, which had been treated with methyl bromide, and by late spring had enough grass to plant the 1500 square foot addition to our No. 2 tee at the Sea Island Golf Club.

"We have been most favorably impressed with the behavior and experience with this grass for tee, fairway, and lawn purposes. The particular tee on which this grass is planted has about one-half the remaining area planted to Tifton 57 Bermuda and the other half to common Bermuda, both of which were planted several years ago.

"The No. 419 seemed to spread and cover very quickly and has formed a very dense, closely knit, rather stiff-bladed turf of very good medium fine texture and excellent dark green color. So far, this turf has not shown the tendency to fluffiness, which is one of the main objections to Tifton 57, as you know, for golf-course use. From our observation so far, I believe this grass is far superior to Tifgreen 328 for fairway or tee purposes, as it seems to be a sturdier grass, which should take less meticulous maintenance than No. 328 and, as you have pointed out in your letter, it certainly provides a better lie because of the stiffer grass blades. I think, too, under heavy playing conditions, particularly on the tees, that this grass would be less likely to show severe damage than Tifton No. 328.

"We had considerable infestation of both crowfoot and common crabgrass on this tee and we sprayed the No. 419 grass along with the rest of the tee with disodium methyl arsonate combined with 2,4-D as the first application and DSMA without the 2,4-D in one or two subsequent applications. The No. 419 did not show any more damage from spraying than either the common or Tifton 57 Bermuda. As you know, Tifgreen is particularly sensitive to 2,4-D as compared with some of the other Bermudas and I should think this would be another advantage for your No. 419 grass."

Glenn W. Burton, Principal Geneticist
Georgia Coastal Plain Experiment Station
Tifton, Georgia

NORDAN'S GRASS FARMS

"For Highest Quality of the Superior Lawn Grasses"

ABBEVILLE, ALA.

Table 1. Comparative Characteristics of Several Bermudagrasses used for turf.

GRASS	Chromosome No. 2n	Disease resistance	Sod density	Weed resistance	Seed head abundance	Fineness	Softness	Type of green color
Tifway	27	1.0	2.3	1.0	1.0	1	3	Very Dark
Tiffine	27	1.0	2.5	1.5	1.5	1	2	Light
Tiflawn	36	1.0	2.9	1.0	3.0	3	4	Dark
Tifgreen	27	1.0	2.2	1.5	1.0	1	1	Dark
Common	36	5.0	6.5	4.0	4.0	4	4	Medium

NOTE: Grasses receiving ratings nearest 1.0 were most resistant to disease and weeds, had the greatest sod density, the fewest seed heads, the finest leaves, and made the softest turf.

Table 2. The 1957 response of Tifway turf Bermuda in comparison with several checks.

GRASS	Plant diameter in inches	Leaf hopper resistance	Height in inches when not cut		Percent of plot covered	Greenness rating (Average for season)	Sod density rating (Average for season)
	4/12	5/28	5/28	6/26	5/28		
Tifway	34.0	2	3.0	7.0	70.0	2.4	2.3
Tifgreen	18.0	2	1.0	3.8	75.0	3.4	2.3
Tiflawn	20.0	2	5.0	6.8	77.5	4.5	4.2
Common	28.0	2	5.0	9.0	82.5	4.2	6.5
5% LSD	2.0	NS	.6	.9	9.6	1.1	1.1

NOTE: Ratings ranged from 1 for excellent color, sod density, and leaf-hopper resistance to 10 for very poor color, density, and leaf-hopper resistance.

Table 3. The 1958 response of Tifway turf Bermuda in comparison with several checks.

GRASS	GREENNESS RATING (AVERAGE FOR SEASON)	SOD-DENSITY RATING (AVERAGE FOR SEASON)	SEEDHEAD ABUNDANCE (AVERAGE TWO DATES)	DENSITY OF RYEGRASS OVERSEEDED ON PLOTS 3/21/59	GREENNESS RATING OF TURF 3/28/59	RECOVERY OF BERMUDA FROM RYEGRASS 4/22/59
Tifway	2.2	2.5	2.0	6.0	4.0	3.0
Tifgreen	2.8	2.0	2.0	5.0	4.0	2.0
Tiflawn	4.3	3.0	4.5	7.0	7.0	5.0
Common	7.3	9.0	5.0	6.0	7.0	10.0

NOTE: Grasses receiving ratings nearest 1.0 had the best color and density, the fewest seedheads, and made the best recovery after ryegrass.

Table 4. The 1959 response of Tifway turf Bermuda in comparison with several checks.

GRASS	SOFTNESS OF GRASS	GREENNESS RATING (AVERAGE FOR SEASON)	SOD-DENSITY RATING (AVERAGE FOR SEASON)	RESISTANCE TO SPURGE INVASION ON GREENS 8/8/59	TYPE OF GREEN COLOR	FROST RESISTANCE RATING
Tifway	3	1.7	2.0	1.0	Very Dark	1
Tifgreen	1	1.9	2.3	2.0	Dark	3
Tiflawn	4	2.7	2.6	1.0	Dark	2
Common	4	3.8	4.0	4.0	Medium	2

NOTE: Grasses receiving ratings nearest 1.0 had the best color and density, the greatest resistance to spurge and frost, and made the softest turf.